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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/784,957

Applicant(s)

YOO ET AL.

Examiner

GERALD SMARTH

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-8, 13-17, 20-24 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8, 13-17, 20-24, 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

I.

DETAILED ACTION

1. It is hereby acknowledged that 10/784957 the following papers have been received and placed of record in the file: Remark date 06/05/2008.
2. Claims 1-38 are presented for examination. Claim 1 and 17 are independent claims. The remaining claims are dependent on claims 1 and 17. Claims 1,4-8,13,14,17,20-24,29 and 30 are being amended. Claims 2, 3, 9-12, 18, 19, 25-28 have been cancelled.
3. The Rejections are respectfully maintained and reproduced infra for application's convenience.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1, 4-8, 13-17, 20-24, 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (2003/0005161) and further in view of Sato (5884004).

Regarding claim 1, Chen teaches a method of reproducing content information stored on an ~~interactive~~ recording medium comprising: ***(Chen states is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing device, such as an information server 310 and a mobile device 320, in accordance with the present invention; Page 3 paragraph 28 line 1-4)***

reproducing first data read out from the ~~interactive~~ recording medium in synchronization with second data received from a Content providing server over a network ***(Chen discloses the system includes a first device associated with the first data store, a second device associated with the second data store, and a serve. The server is coupled to a storage medium on which a synchronization state is stored; Page 1 paragraph 05 line 4-8)*** the first data comprising audio/video data and the second data comprising content data associated with the first data;

sensing a failure in receiving the second data; upon sensing the failure in receiving the second data, ***(Chen discloses is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing device, such as an information server 310 and a mobile device 320, in accordance with the present invention. Page 3 paragraph 28 line 1-6)*** re-synchronizing the first data read out from the recording medium with the second data received from the content providing server over the network based on information for synchronization or re- synchronization

included in the second data. :the information including data rate information of the second data and/or size information of the second data; and continuing to reproduce the first data in Synchronization with the second data, ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)***

Chen does not specifically teach the first data comprising audio/video data and the second data comprising content data associated with the first data; based on information for synchronization or re- synchronization included in the second data. :the information including data rate information of the second data and/or size information
However Sato does teaches the first data comprising audio/video data and the second data comprising content data associated with the first data; ***(Sato discloses the encoding system controller 200 also generates the reproduction time information IT defining the reproduction time of the title editing unit (video object, VOB), and the stream encoding data St33 defining the system encode parameters for multiplexing the encoded multimedia stream containing video, audio, and sub-picture data. Note that the reproduction time information IT and stream encoding data St33 are generated for the video object VOB of each title in one video zone VZ; Column 9 lines 7-15)*** based on information for synchronization or re-synchronization included in the second data the information including data rate information of the second data and/or size information ***(Sato teaches discloses to***

enable this resynchronization, audio reproduction stopping times 1 and 2, i.e., Audio Stop PTM 1 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM1), and Audio Stop PTM2 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM2), indicating the time at which the audio is to be paused; and audio reproduction stopping periods 1 and 2, i.e., Audio Gap Length 1 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN1) and Audio Gap Length 2 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN2), indicating for how long the audio is to be paused, are also declared in the DSI packet. Note that these times are specified at the system clock precision (90 KHz); Column 26 line 17-26)(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Chen's system and method for recovering failed synchronization session with Sato's optical disc for generating a bistream containing a plurality of video objects including video and audio data. One of ordinary skill in the art would have been motivated to make this modification in order to have a more efficient and seamless reproduction method/system. Saito discloses therefore, the object of the present invention is to provide a data structure whereby natural, seamless reproduction without scene data intermitting can be achieved even in such multi-angle scene periods; a method for generating a system stream having said data structure; a recording apparatus and a reproduction apparatus for recording and reproducing said

Art Unit: 2146

system stream; and a medium to which said system stream can be recorded and from which said system stream can be reproduced by said recording apparatus and reproduction apparatus. Column 2 lines 65 -Column 3 line 7.

Therefore, it would be obvious to combine Chen and Sato to arrive to the limitations of claim 1.

2.-3. (Canceled)

Regarding claim 4, Chen in view of Sato taught the method according to claim 1, as described above. Chen and Sato further teaches wherein the re-synchronizing step includes identifying the information for synchronization or re- synchronization [[is]] contained within a header portion of the second data. **(Chen Fig. 4, 5) (Sato discloses the pack header PKH records the time at which that pack is to be sent from stream buffer 2400 to system decoder 2500 (see FIG. 26), i.e., the system clock reference SCR defining the reference time for synchronized audio-visual data playback; Column 24 line 10-14)**

Regarding claim 5, Chen in view of Sato taught the method according to claim 1, as described above. Chen further teaches wherein the sensing step includes sensing whether the failure in receiving the second data is due to a disconnection or a delay of transmission of the second data over the network. **(Chen**

discloses in addition, in general, the method includes detecting and recovering from a failed prior synchronization session. In one embodiment, a failed synchronization session is detected by comparing a sync key transmitted by the mobile device in a sync request to a prior sync key stored in a synchronization state table. For this embodiment, a failed synchronization session is detected when the request sync key is one less than the prior sync key; Page 1 paragraph 4 lines 1-5)

Regarding claim 6, Chen in view of Sato taught the method according to claim 1, as described above. Sato also teaches further comprising:
delaying a time for re-synchronization, wherein during the re-synchronization delay the first data is reproduced, and the second data is muted and not reproduced. **(Sato discloses the decoding speed of the communications system can also become a problem when the source stream is supplied directly as occurs with live broadcasts, cable television and other dedicated line transmissions, broadcast satellites and other radio wave transmissions, and other means whereby title content is not reproduced from a recording medium on the user's side. In such cases the transmitted source stream must be interleaved; Column 40 line 57-65)**

Regarding claim 7, Chen in view of Sato taught the method according to claim 1, as described above. Sato also teaches further comprising:
delaying a time, for re-synchronization, wherein during the re-synchronization delay the

Art Unit: 2146

first data is reproduced, and interpolated second data is reproduced. (**Sato discloses the audio reproduction stopping time 1 VOB.sub.-- A.sub.-- STP.sub.-- PTM1.sub.-- reg stores the time at which the audio is to be paused to enable resynchronization, and the audio reproduction stopping period 1 VOB.sub.-- A.sub.-- GAP.sub.-- LEN1.sub.-- reg stores the length of this pause period.;** Column 26 line 17-26)

Regarding claim 8, Chen in view of Sato taught the method according to claim 1, as described above. Chen also teaches further comprising: delaying a time for re-synchronization, wherein during the re-synchronization delay the first data is reproduced, and a previous segment of the second data is reproduced. (**Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)**

9.-12. (Canceled)

Regarding claim 13, Chen in view of Sato taught the method according to claim 1, as described above. Sato further teaches wherein said re-synchronization step includes: calculating an offset value for the second data to establish re-synchronization; (**Sato**

discloses the audio start gap A.sub.— STGAP is the time offset between the start of the audio and video presentation at the beginning of a VOB. This is a useful parameter for declaring seamless reproduction with the preceding encoded system stream; Column 61 line 27-30)

sending a command requesting transmission of the second data corresponding to the calculated offset value to the content providing server; and
re-synchronizing the second data transmitted in response to the command with the first data read out from the recording medium. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)***

Regarding claim 14, Chen in view of Sato taught the method according to claim 13, as described above. Sato further teaches wherein said calculating step is based on a present playing time of the first data read from the recording medium and the number of bytes per second of the second data. ***(Sato discloses though comprising two recording surfaces similarly to the recording media shown in FIG. 7, the DVD recording medium RC3 shown in FIG. 8 has the recording surfaces on opposite sides of the disk, i.e., has the first data recording surface RS1 on side SA and the second data recording surface RS2 on side SB; Column 14 line 60-65)***

Regarding claim 15, Chen in view of Sato taught the method according to claim 13, as described above. Sato further teaches wherein the offset value of the second data capable of re-synchronization is calculated by adding the present playing time of the first data to a predetermined amount of time and multiplying the result by the number of bytes per second of the second data. ***(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)***

Regarding claim 16, Chen in view of Sato taught the method according to claim 15, as described above. Sato further teaches wherein the predetermined amount of time is determined in proportion to a speed of the second data being transferred over the network. ***(Sato discloses in order to achieve the aforementioned objective, an interleaving method which for the presentation of a bitstream that is reproduced by selecting two or more data units from a bitstream comprising three or more data units contiguous on the same time-base is characterized by generating said bitstream by arranging the selected data units in a particular sequence on the same time-base based on the presentation time of each data unit so that it is possible to sequentially access all data units and present only the selected data units without time-base intermittence; Column 3 line 18-27)***

Regarding claim 17, Chen teaches an apparatus for reproducing content information. comprising: ***(Chen states is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing device, such as an information server 310 and a mobile device 320, in accordance with the present invention; Page 3 paragraph 28 line 1-4)***

a renderer configured to reproduce first data read out from a recording medium in synchronization with second data received from a content providing server over a network. ***(Chen discloses the system includes a first device associated with the first data store, a second device associated with the second data store, and a serve. The server is coupled to a storage medium on which a synchronization state is stored; Page 1 paragraph 05 line 4-8)*** the first data comprising audio/video data and the second data comprising content data associated with the first data; and a processor configured to determine a failure in receiving tile second data. and upon determining the failure in receiving the second data, ***(Chen discloses is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing device, such as an information server 310 and a mobile device 320, in accordance with the present invention. Page 3 paragraph 28 line 1-6)*** re-synchronizing the first data read out from the recording medium with the second data received from the content providing server over the network based on

information for synchronization or re-synchronization including in the second data, the information including data rate information of the second data and/or size information of the second data, and cause said renderer to continue reproducing the first data in synchronization with the: second data, wherein said processor(is configured to evaluate the information for synchronization or re-synchronization contained within the second data. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12. Chen further discloses the synchronization application 342 saves information regarding the synchronization session in a synchronization state table 344; Page 3 paragraph 30 lines 13-16)***

Chen does not specifically teach the first data comprising audio/video data and the second data comprising content data associated with the first data; based on information for synchronization or re- synchronization included in the second data. :the information including data rate information of the second data and/or size information However Sato does teaches the first data comprising audio/video data and the second data comprising content data associated with the first data; ***(Sato discloses the encoding system controller 200 also generates the reproduction time information IT defining the reproduction time of the title editing unit (video object, VOB), and the stream encoding data St33 defining the system encode parameters for multiplexing the encoded multimedia stream containing video, audio, and sub-***

picture data. Note that the reproduction time information IT and stream encoding data St33 are generated for the video object VOB of each title in one video zone VZ; Column 9 lines 7-15) based on information for synchronization or re-synchronization included in the second data the information including data rate information of the second data and/or size information (Sato teaches discloses to enable this resynchronization, audio reproduction stopping times 1 and 2, i.e., Audio Stop PTM 1 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM1), and Audio Stop PTM2 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM2), indicating the time at which the audio is to be paused; and audio reproduction stopping periods 1 and 2, i.e., Audio Gap Length 1 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN1) and Audio Gap Length 2 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN2), indicating for how long the audio is to be paused, are also declared in the DSI packet. Note that these times are specified at the system clock precision (90 Khz); Column 26 line 17-26)(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Chen's system and method for recovering failed synchronization session with Sato's optical disc for generating a bistream containing a plurality of video objects including video and audio data. One of ordinary skill in the art would have been motivated to make this modification in order to have a more efficient

and seamless reproduction method/system. Saito discloses therefore, the object of the present invention is to provide a data structure whereby natural, seamless reproduction without scene data intermitting can be achieved even in such multi-angle scene periods; a method for generating a system stream having said data structure; a recording apparatus and a reproduction apparatus for recording and reproducing said system stream; and a medium to which said system stream can be recorded and from which said system stream can be reproduced by said recording apparatus and reproduction apparatus. Column 2 lines 65 -Column 3 line 7.

Therefore, it would be obvious to combine Chen and Sato to arrive to the limitations of claim 17.

18.-19. (Canceled)

Regarding claim 20, Chen in view of Sato taught the apparatus according to claim 17, as described above. Chen and Sato further teaches wherein the processor is configured to evaluate the information for synchronization or re- synchronization [[is]] contained within a header portion of the second data. **(Chen Fig. 4, 5) (Sato discloses the pack header PKH records the time at which that pack is to be sent from stream buffer 2400 to system decoder 2500 (see FIG. 26), i.e., the system clock reference SCR defining the reference time for synchronized audio-visual data playback; Column 24 line 10-14)**

Regarding claim 21, Chen in view of Sato taught, the apparatus according to claim 17, as described above. Chen also teaches wherein the processor is configured to determine whether the failure in receiving the second data is due to a disconnection or a delay of transmission of the second data over the network. **(Chen discloses in addition, in general, the method includes detecting and recovering from a failed prior synchronization session. In one embodiment, a failed synchronization session is detected by comparing a sync key transmitted by the mobile device in a sync request to a prior sync key stored in a synchronization state table. For this embodiment, a failed synchronization session is detected when the request sync key is one less than the prior sync key; Page 1 paragraph 4 lines 1-5)**

Regarding claim 22, Chen in view of Sato taught the apparatus according to claim 17, as described above. Sato further teaches wherein the processor is configured to delay a time for re-synchronization, and control that during the-re- synchronization delay the first data is reproduced, and the second data is muted and not reproduced, during the re-synchronization delay. **(Sato discloses the decoding speed of the communications system can also become a problem when the source stream is supplied directly as occurs with live broadcasts, cable television and other dedicated line transmissions, broadcast satellites and other radio wave transmissions, and other means whereby title content is not reproduced from a recording medium on**

the user's side. In such cases the transmitted source stream must be interleaved; Column 40 line 57-65)

Regarding claim 23, Chen in view of Sato taught the apparatus according to claim 17, as described above. Chen further teaches wherein the processor is configured to delay a time for resynchronization, and control that during the resynchronization delay the first data is reproduced, and interpolated second data is reproduced, during the re-synchronization delay. ***(Sato discloses the audio reproduction stopping time 1 VOB.sub.-- A.sub.-- STP.sub.-- PTM1.sub.-- reg stores the time at which the audio is to be paused to enable resynchronization, and the audio reproduction stopping period 1 VOB.sub.-- A.sub.-- GAP.sub.-- LEN1.sub.-- reg stores the length of this pause period.; Column 26 line 17-26)***

Regarding claim 24, Chen in view of Sato taught the apparatus according to claim 17, as described above. wherein the processor is configured to delay a time for resynchronization, and control that during resynchronization delay-the first data is reproduced, and a previous segment of the second data is reproduced, during the re-synchronization delay. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3***

paragraph 31 line 7-12) (Sato discloses the audio reproduction stopping time 1 VOB.sub.-- A.sub.-- STP.sub.-- PTM1.sub.-- reg stores the time at which the audio is to be paused to enable resynchronization, and the audio reproduction stopping period 1 VOB.sub.-- A.sub.-- GAP.sub.-- LEN1.sub.-- reg stores the length of this pause period.; Column 26 line 17-26)

25.-28. (Canceled)

Regarding claim 29, Chen in view of Sato taught the apparatus according to claim 17, as described above. Chen further teaches wherein said. processor, in re-synchronizing the first data and second data, is configured to calculate an offset value for the second data to establish re-synchronization sends of the second data corresponding to the calculated offset value to the Content providing server; **(Sato discloses the audio start gap A.sub.-- STGAP is the time offset between the start of the audio and video presentation at the beginning of a VOB. This is a useful parameter for declaring seamless reproduction with the preceding encoded system stream; Column 61 line 27-30)** and re synchronize or re-synchronize the second data transmitted in response to the command with the first data read out from the recording medium. . **(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the**

mobile device 320. Page 3 paragraph 31 line 7-12)

Regarding claim 30, Chen in view of Sato taught the apparatus according to claim 29, as described above. Sato further teaches wherein said processor ugeis configured to use a present playing time of the first data read from the recording medium and the number of bytes per second of the second data, when calculating the offset value, **(Sato discloses the audio start gap A.sub.-- STGAP is the time offset between the start of the audio and video presentation at the beginning of a VOB. This is a useful parameter for declaring seamless reproduction with the preceding encoded system stream; Column 61 line 27-30)**

Regarding claim 31, Chen in view Sato taught the apparatus according to claim 29, as described above. Sato further teaches wherein the offset value of the second data capable of re-synchronization is calculated by said processor by adding the present playing time of the first data to a predetermined amount of time and multiplying the result by the number of bytes per second of the second data. **(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)**

Art Unit: 2146

Regarding claim 32, Chen in view of Sato taught the apparatus according to claim 31, as described above. Sato further teaches wherein the predetermined amount of time is determined in proportion to a speed of the second data being transferred over the network. ***(Sato discloses in order to achieve the aforementioned objective, an interleaving method which for the presentation of a bitstream that is reproduced by selecting two or more data units from a bitstream comprising three or more data units contiguous on the same time-base is characterized by generating said bitstream by arranging the selected data units in a particular sequence on the same time-base based on the presentation time of each data unit so that it is possible to sequentially access all data units and present only the selected data units without time-base intermittence; Column 3 line 18-27)***

33.-38. (Canceled)

Response to Arguments

6. Applicant's arguments with respect to claims 1, 4-8, 13-17, 20-24, 29-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Smarth whose telephone number is (571)270-1923. The examiner can normally be reached on Monday-Friday(7:30am-5:00pm)est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2146

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. S./

Examiner, Art Unit 2146

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2146